

## Idaho Crews Overcome Challenges to Safely Dispose 1-Million-Pound Hot Cell

**IDAHO FALLS, Idaho** – American Recovery and Reinvestment Act cleanup crews at the Idaho site recently disposed of a hot cell as heavy as nine fully loaded Boeing 737s.

Unlike the aircrafts, the 1-million-pound concrete structure moved about two miles per hour on a trailer with 224 tires towed by a semi-truck. Workers safely transported the cell from the Advanced Test Reactor Complex (ATR-C) to an onsite landfill two miles away.

About \$6.5 million from the Recovery Act funded the project, which also included the demolition of two other hot cells at the ATR-C and the building that housed the structures. The cells were designed and built in the 1950s and 1960s to safely shield individuals from radioisotopes as they used mechanical, hand-like

manipulators to assemble and disassemble nuclear test reactor components and to examine materials exposed to neutron bombardment. They were also used to produce radioisotopes, including cobalt-60 and iridium-192, for radiography and other medical procedures, such as cancer treatment.

Extensive work preceded disposal of the largest cell. A massive gantry crane was erected to hoist the one-piece structure on the trailer. Premier Technology, a small business located in nearby Blackfoot, manufactured lifting fixtures for the task. Workers drilled more than 150 holes into the cell and inserted bolts that weighed 40 pounds each. An onsite maintenance team fabricated a large pan filled with sand to stabilize the uneven structure as it was transported on the trailer. A track-type tractor also towed the truck and trailer up a slight incline at the end of the journey.

The radioactively contaminated structure was placed in the landfill and filled with grout for safe, permanent disposal. The cell will be a visible structure until the 510,000-cubic-yard repository is at capacity and capped.

Top photo: Workers wrap plastic around the hot cell to prepare it for transport to an onsite landfill.

Middle photo: Cleanup crews gather for a photo in front of the hot cell before it is transported to an onsite landfill.

Bottom photo: A truck transports the hot cell on the two-mile route to the onsite landfill.

Background photo: The truck and trailer leave the onsite landfill after workers moved the hot cell there.





